UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/664,771 | 09/17/2003 | Achim Kraiss | 13906-109001 / 2003P00171 | 4871 |

| 32864    7590    08/27/2007 |
|---|
| FISH & RICHARDSON, P.C. |
| PO BOX 1022 |
| MINNEAPOLIS, MN 55440-1022 |

| EXAMINER |
|---|
| SAINT CYR, LEONARD |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2626 | |

| MAIL DATE | DELIVERY MODE |
|---|---|
| 08/27/2007 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 10/664,771 | KRAISS ET AL. |
| | Examiner | Art Unit | |
| | Leonard Saint-Cyr | 2626 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
   Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on *28 June 2007*.

2a) ☒ This action is **FINAL**.  2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) *1-3 and 5-27* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-3 and 5-27* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All  b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Arguments*

1.     Applicant's arguments filed 06/28/07 have been fully considered but they are not persuasive.

2.     Applicant argues that Lakritz does not teach determining the output language from a login by the same front-end application that requests execution of a task associated with a data mining model (Amendment, page 7).

The examiner disagrees; Lakritz teaches that the visitor module works in tandem with a customer's existing Web server. It automatically determines the language and country of a Web site visitor and directs the Web server to deliver the appropriate localized content contained in one or more country/language databases and/or file-based content in a file system to deliver to the visitor's browser, wherein template model is used to dynamically create documents tailored for a specific language or country (page 5, lines 24 - 28; page 44, lines 4 – 7). Automatically determining the language of Web site visitor, and directing the Web server to deliver the appropriate localized content implies determining the output language from a login by the same front-end application that requests execution of a task associated with a data mining model, since the appropriate content is localized in the specific template model for that language.

3.     Applicant argues that Lakritz does not teach multi-language support for data mining models (Amendment, page 8).

The examiner disagrees; Lakritz teaches that the invention enhances an existing web site by adding an advanced multilingual content management and process control capabilities to the customer's Web server (page 4, line 38 – page 5, line 2).

4.      Applicant argues that Lakritz does not teach receiving a back-end model output from the back end analytical engine, the back-end model output including information generated in response to the execution of the data mining model based upon the input data of the task request (Amendment, pages 8, and 9).

The examiner disagrees, Lakritz teaches that the required content for the Web site visitor's language and country is checked to see if has been previously requested and resident in the cache 302. If the content is in the cache, then it is delivered from the cache 303. If the required content is not in the cache, then the Web server is notified of the appropriate localized content required 304. Then appropriate content is then placed into the cache for future reference (page 6, lines 27 – 33). When a visitor enters the site, the requested document is automatically served in the visitor's language and for the visitor's country by filling in a document template from the master site with the correct language content from the language/country database (Abstract, lines 6 – 8). Automatically delivering the requested document by filling a document template from the master site implies receiving a back-end model output from the back end analytical engine, since the appropriate content is delivered based on the visitor's request.

### *Claim Objections*

5.      Claim 10 is objected to because of the following informalities:  In claim 10, line 1,

" the computer-implemented method" should be replaced by – a computer-implemented

method -.  Appropriate correction is required.


### *Claim Rejections - 35 USC § 102*

6.      The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7.      Claims 1- 3, 9, 10, 12, 15 – 20, 24 - 27 are rejected under 35 U.S.C. 102(b) as

being anticipated by Lakritz (WO 01/69420).

As per claim 1, Lakritz teaches a computer-implemented method for providing

multi-language support for data mining models, the method comprising:

receiving an extension document (website visitor suggests receiving an input

information) having first and second entries associated with a unique identifier ("tag-

based templates allow a single document to be used across all languages") in a textual

description field of a data mining model ("template model"), the first entry including

textual information in a first language, and the second entry including textual information

in a second language ("a single document can be constructed so that it will

automatically localized for different languages and locales"; page 10, lines 4 – 6, and 31

– 37; page 44, lines 4 – 30; page 45, lines 15, and 16) ;

processing a request from a front-end application to execute an analytical task

associated with the data mining model ("automatically determines the language and

country of the web site visitor and directs the web server to deliver the appropriate

localized content"; Abstract, lines 1 - 3; page 3, lines 5 – 10);

determining from a login by the front-end application that the textual information

should be output in the first language ("It automatically determines the language and

country of a Web site visitor and directs the Web server to deliver the appropriate

localized content contained in one or more country/language databases and/or file-

based content in a file system to deliver to the visitor's browser, wherein template model

is used to dynamically create documents tailored for a specific language or country";

page 5, lines 24 - 28; page 44, lines 4 – 7); and

outputting to the front-end application an updated model output that includes the

first entry such that the textual information is output in the first language (" the requested

document is automatically served in the visitor's language"; Abstract, lines 6 – 8; page

44, lines 25, and 26).


As per claim 10, Lakritz teaches a computer-implemented method for outputting

textual descriptions of data fields in a data mining model in a selected language, the

method comprising:

receiving an extension document corresponding to a data mining model, the

model including a unique identifier associated with a textual description of a data field in

the data mining model; storing contents of the extension document in a database

("content from the database"), the contents of the extension document having first and

second entries associated with the unique identifier ("tag-based templates allow a single

document to be used across all languages"), the first entry including the textual

description of the data field in a first language, and the second entry including the

textual description of the data field in a second language("a single document can be

constructed so that it will automatically localized for different languages and locales";

page 10, lines 4 – 6, and 31 – 37; page 44, lines 4 – 30; page 45, lines 15, and 16;

content from the database"; Abstract, lines 7, and 8);

receiving a task request from a front-end application, the task request including

input data for use with the data mining models (Abstract, lines 6 – 9);

in response to the task request from the front-end application, invoking a back-

end analytical engine to execute the data mining model based upon the input data of

the task request; receiving a back-end model output from the back-end analytical

engine, the back-end model output including information generated in response to the

execution of the data mining model based upon the input data of the task request

("When a visitor enters the site, the requested document is automatically served in the

visitor's language and for the visitor's country by filling in a document template from the

master site with the correct language content from the language/country database";

page 6, lines 27 – 33; Abstract, lines 6 – 9);

inserting the first entry from the contents of the extension document into the

back-end model output to produce an updated model output ("visitor module greatly

enhances the multilingual web site visitor's experience"; page 5, lines 17 – 26), and

outputting to the front-end application the updated model output that includes the

first entry from the contents of the extension document such that the textual description

of the data field is output in the first language (" the requested document is

automatically served in the visitor's language"; Abstract, lines 6 – 8; page 44, lines 25,

and 26).


As per claim 17, Lakritz teaches a computer-implemented method for providing

multi-language support for data mining models, the method comprising:

receiving an extension document (website visitor suggests receiving an input

information) having first and second entries associated with a unique identifier ("tag-

based templates allow a single document to be used across all languages") in a textual

description field of a data mining model ("template model"), the first entry including

textual information in a first language, and the second entry including textual information

in a second language ("a single document can be constructed so that it will

automatically localized for different languages and locales"; page 10, lines 4 – 6, and 31

– 37; page 44, lines 4 – 30; page 45, lines 15, and 16) ;

processing a request from a front-end application to execute an analytical task

associated with the data mining model, the request from the front-end application

including input data that is employed by a back-end analytical engine to execute the

data mining model to generate a back-end model output, the back-end model output

including the unique identifier ("When a visitor enters the site, the requested document

is automatically served in the visitor's language and for the visitor's country by filling in a

document template from the master site with the correct language content from the

language/country database"; page 6, lines 27 – 33; Abstract, lines 6 – 9); and

in response to receiving the back-end model output from the back-end analytical

engine, outputting to the front-end application an updated model output that includes the

first entry such that the textual information is output in the first language (" the requested

document is automatically served in the visitor's language"; Abstract, lines 6 – 8; page

44, lines 25, and 26).

As per claims 2, and 18, Lakritz further discloses that the extension document is

received from the back-end analytical system ("visitor module greatly enhances the

multilingual web site visitor's experience"; page 5, lines 17 – 26).

As per claims 3, and 19, Lakritz further discloses storing contents of the

extension document in a database, the contents including the first and second entries

("content from the database"; Abstract, lines 7, and 8).

As per claims 9, 16, and 24, Lakritz further discloses that the first language is

English and the second language is German (page 82, lines 11 – 20; page 40, lines 1 –

5).

As per claims 15, and 25, Lakritz further discloses substituting the first entry of

the extension document for the unique identifier such that the textual description of the

data field is output in the first language ("enabling it to be replaced with its translation in the most recently valid language of the visitor"; col.8, lines 30 – 34).

As per claims 12, and 20, Lakritz further discloses determining from a login by the front-end application that the textual information should be output in the first language ("It automatically determines the language and country of a Web site visitor and directs the Web server to deliver the appropriate localized content contained in one or more country/language databases and/or file-based content in a file system to deliver to the visitor's browser, wherein template model is used to dynamically create documents tailored for a specific language or country"; page 5, lines 24 - 28; page 44, lines 4 – 7).

As per claim 26, Lakritz further disclose that the data mining model includes rules and patterns derived from historical data that has been collected, synthesized and formatted ("pre-made rule sets and access pattern"; page 11, lines 25 – 28; page 78, line 2).

As per claim 27, Lakritz further disclose that the updated model output includes the output values for data fields originally determined by the back-end analytical engine and the textual description of those fields in the first language ("save the current value of the referrer URL in the http request"; page 38, lines 31, and 32; page 57, lines 15, and 16).

## Claim Rejections - 35 USC § 103

8.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9.      Claims 5 – 8, 11, 13, 14, 21 -23 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Lakritz (WO 01/69420) in view of Russakovsky et al., (US Patent

7,024,417).

As per claims 5, and 13, Lakritz does not specifically teach that the request from

the front-end application is a request for execution of a prediction task.

Russakovsky et al., teach task for exporting mining models to and importing

mining models from predictive model markup language (col.7, lines 26 – 31).

Therefore it would have been obvious to one of ordinary skill in the art at the time

the invention was made to use predictive model markup language as taught by

Russakovsky et al., in Lakritz because that would efficiently produce new previously

unknown information (col.1, lines 2 4 – 26).


As per claim 6, Russakovsky et al., further disclose invoking execution of the

prediction task by a prediction engine using the data mining model (col.7, lines 26 – 31).

As per claim 7, Russakovsky et al., further disclose that the data mining model and the extension document are PMML-compliant (col.7, lines 26 – 31).

As per claim 8, Russakovsky et al., further disclose that the data mining model includes a data field indicative of a predicted result of a particular transaction between the front-end application and a customer ("mining objects such as models and results sets are usually stored in at the site of the original data source"; col.7, lines 16 – 18, and 26 – 28).

As per claims 11,14, 21, and 22, Lakritz does not specifically teach that the data mining model and the extension document are PMML-compliant; invoking execution of the prediction task by a prediction engine using the data mining model.

Russakovsky et al., teach task for exporting mining models to and importing mining models from predictive model markup language (col.7, lines 26 – 31).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use predictive model markup language as taught by Russakovsky et al., in Lakritz because that would efficiently produce new previously unknown information (col.1, lines 2 4 – 26).

As per claim 23, Russakovsky et al., further disclose that the data mining model includes a data field indicative of a predicted result of a particular transaction between the front-end application and a customer ("mining objects such as models and results

sets are usually stored in at the site of the original data source"; col.7, lines 16 – 18, and

26 – 28).

## *Conclusion*

10.    **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

11.    Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Leonard Saint-Cyr whose telephone number is (571)

272-4247. The examiner can normally be reached on Mon- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone

number for the organization where this application or proceeding is assigned is (571)-

273-8300.

Information regarding the status of an application may be obtained from the

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


LS
03/27/07

RICHEMOND DORVIL
SUPERVISORY PATENT EXAMINER